**12. Low Back Pain By Ilana Ramer Bass**

**Overview**

* Very common, ~80% of adults will have low back pain at some time in their lives
  + Vast majority of cases will be non-specific low back pain
  + Usually lasts 6-8 weeks and will have at least 1 recurrence
  + Rarely a harbinger of serious medical illness
* Risk factors:
  + Occupation/strenuous work, obesity, age >30, female gender, physical inactivity, arthritis, stress, depression, smoking
* Acuity
  + Acute <4 weeks
  + Subacute 4-12 weeks
  + Chronic >12 weeks
* Differential diagnosis:

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| **Etiologies** | **Findings** |
| Musculoskeletal | History of an inciting event/trauma |
| Spinal Stenosis (bony overgrowth) | Bilateral radiation; worse with ambulation, better with sitting or leaning forward |
| Herniated disc | Unilateral radiation |
| Osteoarthritis | Older age, associated with activity and relieved by rest |
| Metastatic disease | Hx of cancer- breast, lung, thyroid, kidney, prostate |
| Spinal epidural abscess | Fever, malaise, hx of IVDU or spinal manipulation (ex: epidural) |
| Vertebral osteomyelitis | Post-procedural, immunocompromise, IVDU |
| Vertebral compression fracture | Acute onset localized back pain; osteoporosis |
| Outside the back: pyelonephritis, pancreatitis, nephrolithiasis, Herpes Zoster |  |

\**Sciatica*= a sharp or burning pain radiating down from the buttock along the course of the sciatic nerve. Most is attributable to radiculopathy at L5 or S1 level; pain travels posterior or lateral aspect of the leg usually to the foot or ankle.

\*\* Radicular pain is caused by damage to the spinal nerve root.

* + **RED FLAGS** for cord compression/cauda equine syndrome:
  + Bladder/bowel dysfunction, saddle anesthesia, weakness, numbness, B-symptoms (fever, weight loss, night sweats), history of cancer, IVDU
* Physical exam:
  + Inspection: rash, asymmetry, deformity
  + Palpation: point tenderness vs. paraspinal muscle tenderness
  + Range of motion, sensation, strength, reflexes
  + Special maneuvers:
    - Straight leg raise (sen 90%, spec 30%)—passively raise leg with ankle dorsiflexed; if elicits pain at 30-60 degree angle then positive
* Immediate Imaging with MRI:
  + Major risk factor for cancer
  + Recent infection
  + Signs of cauda equina syndrome
  + Severe/progressive neuro deficits
    - If concerned for malignancy or infection but suspicion is not high; can get x-ray and ESR
* Treatment:
  + High dose NSAIDs
    - Naproxen 500mg q12hrs or ibuprofen 400-600mg q6hrs standing x7-10 days
      * If cannot tolerate, give high dose tylenol
  + Muscle relaxants (flexeril, tizanidine)—advise patient to take at bedtime as can cause drowsiness
  + Gabapentin/pregabalin if radicular pain
  + Physical therapy
  + NO bed rest!!

**Back Pain at IMA**

* Patient education is important—provide information as to the cause of their back pain, the favorable prognosis and minimal value of diagnostic testing and advise them to stay active!
  + 70-90% improve within 7 weeks
  + Recurrences are common (50% within 6 months) but recurrences also have a favorable prognosis
* Predictors of disabling chronic low back pain:
  + Maladaptive pain coping behaviors (ex: avoid activity out of fear), functional impairment, poor general health status, presence of psychiatric comorbidities or nonorganic signs
* Referral to “Physical Therapy”
  + Will automatically print a prescription and a list of physical therapy places/contact information
* Provide exercises using the “References” tab and forward them to your patient instructions so that they print with the AVS

